CHAPTER 12

NORTHERN ROCKFISH

by

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Executive Summary

In 2005, BSAI rockfish have been moved to a biennial assessment schedule to coincide with the frequency of trawl surveys in the Aleutian Islands and the eastern Bering Sea slope. These surveys occur in even years, and for these years a full assessment of northern rockfish in the BSAI area will be conducted. The 2004 full assessment for BSAI northern rockfish can be found at http://www.afsc.noaa.gov/refm/docs/2004/BSAInortherns.pdf. In the odd years in which the surveys are not conducted, the existing model will be updated with new catch information and extended to the current year, and an executive summary containing the biological and fishing mortality reference points and the harvest projections will be presented. It is recommended that the ABCs from the updated model be used for 2006 and 2007.

Summary of results

There is no change in the model structure from 2004, and the only change in the input data was an updated 2004 catch and adding an estimate of the 2005 catch. The 2004 catch was increased from the preliminary estimate of 4,166 t used in the 2004 assessment to the final estimate of 4,281 t, and the 2005 catch was set at 3,870 t, the observed level through Oct 8.

The estimate of 2006 total biomass is 203,823 t, an increase of 2% from the 2005 estimate of total biomass of 200,013 t obtained from the 2004 assessment. The estimate of 2006 SSB is 66,845 t, an increase of less than 1% from the estimate of 2005 SSB of 66,559 t obtained in the 2004 assessment. The projected 2006 ABC and OFL are 8,532 t and 10,137 t, respectively. The 2007 ABC and OFL were obtained by assuming that the 2006 catch is equivalent to the ABC in that year, and are 8,321 t and 9,887 t, respectively. A comparison of results from the 2004 and 2005 assessments are shown below.

	2004 assessment Year		2005 assessment Year	
	2005	2006	2006	2007
M	0.05	0.05	0.05	0.05
tier	3a	3a	3a	3a
Total Biomass	200,013	195,449	203,823	199,599
SSB	66,559	65,287	66,845	65,927
$B_{100\%}$	114,780	114,780	114,884	114,884
$B_{40\%}$	45,912	45,912	45,954	45,954
$B_{35\%}$	40,173	40,173	40,210	40,210
$F_{35\%}$	0.058	0.058	0.059	0.059
F_{ofl}	0.058	0.058	0.059	0.059
$F_{40\%}$	0.048	0.048	0.049	0.049
maximum F_{abc}	0.048	0.048	0.049	0.049
recommended F_{abc}	0.048	0.048	0.049	0.049
OFL	9,813	9,472	10,137	9,887
Maximum allowable ABC	8,260	8,044	8,532	8,321
recommended ABC	8,260	8,044	8,532	8,321

Responses to the Comments of the Statistical and Scientific Committee (SSC)

From the December, 2004, minutes: "*The SSC recognizes that additional genetic sampling was conducted, and we encourage the genetic analysis to be conducted in a timely manner to achieve a more solid basis for apportionment determinations."*

A research contract was established with Dr. Anthony Gharrett of the University of Alaska to analyze the northern rockfish genetic samples collected in 2004, with a start date of September 2005.

"*Regarding the contribution of older females to stock productivity, the SSC requests that the SAFE authors examine the consequences for rockfish management in both the BSAI and GOA if it is true that older females have a disproportionate large contribution to stock productivity, and are also disproportionately harvested due to their size. We request that this type of management strategy evaluation be done for those species for which loss of older females is most prevalent or suspected. We also request that an evaluation of the actual degree of loss of older aged females be provided, including an evaluation of how to adjust for earlier fishery data where there may have been intense fishing prior to historic age collections. We encourage comparison of BSAI and GOA results"*

Please see the BSAI POP assessment for a response to item.